

Without acquiescence to the Examiner's position and in an effort to expedite prosecution, Applicants have canceled claims 1-13 but reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Rejections under 35 U.S.C. §103

Graubart et al. (U.S. 5,454,984) ("Graubart")

Claims 1-11 are rejected as obvious over Graubart. The Examiner alleges that Graubart discloses cleaning compositions comprising about 0.01 - about 10% of a quaternary ammonium compound in a polyglycol. The Examiner interprets "about 10%" to include amounts slightly greater than 10% since it would have been obvious to one skilled in the art to slightly increase antimicrobial and cleaning strength of the composition.

Again without acquiescence to the Examiner's position and in an effort to expedite prosecution, claims 1-11 have been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Graubart et al. (U.S. 5,454,984) ("Graubart") in view of Lonza Bardac 2050 product sheet (2000), hereafter "Lonza"

Claims 1-16, 20 and 21 are rejected as obvious over Graubart in view of Lonza. The Examiner applies Graubart as discussed above. Lonza allegedly discloses that Bardac 2050 is 50% quaternary ammonium chloride, 40% ethanol and 10% water. The Examiner admits that Graubart and Lonza do not explicitly teach varying the amounts of the quaternary agent, ethanol or water but that manipulation of the amounts of these ingredients would have been obvious to one skilled in the art.

Without acquiescence to the Examiner's position and in an effort to expedite prosecution, claims 1-16, 20 and 21 have been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Graubart et al. (U.S. 5,454,984) ("Graubart") in view of Lonza Bardac 2050 product sheet (2000), hereafter "Lonza" and further in combination with Bansemir et al. (U.S. 5,030,659) ("Bansemir")

Claims 22 and 23 are rejected as obvious over Graubart in view of Lonza and Bansemir. The Examiner applies Graubart and Lonza as above and alleges that Bansemir discloses that propylene glycol is an effective solvent for quaternary ammonium compounds. The Examiner concludes that it would have been obvious to use both ethanol and propylene glycol as solvents for a quaternary ammonium compound allegedly motivated by using less amounts of each solvent compared to that necessary for dissolution when used alone would be necessary since the two solvents would have an additive effect for dissolving the quaternary ammonium compound and the availability of the solvents.

Again without acquiescence to the Examiner's position and in an effort to expedite prosecution, claims 22 and 23 have been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Smith (U.S. 5,414,124) ("Smith")

Claims 1-21 and 47-51 are rejected as allegedly obvious over Smith. Smith is applied as above. The Examiner alleges that Smith does not explicitly teach varying the amounts of the quaternary agent, propylene glycol or water but that manipulation of the amounts of these ingredients would have been obvious to one skilled in the art to increase or decrease the antimicrobial properties desired in the formulation.

Without acquiescence to the Examiner's position, and in an effort to expedite prosecution, claims 1-21 and 47-51 have been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Smith (U.S. 5,414,124) ("Smith") in view of The Merck Index (1985) ("Merck")

Claim 24 is rejected as allegedly obvious by Smith in view of Merck. The Examiner applies Smith as above and states that Smith does not teach glycerol as a solvent for quaternary ammonium compounds. Then further alleges that Merck teaches that propylene glycol and glycerol are substitutes for each other. The Examiner then concludes that it would

have been obvious to one skilled in the art to substitute glycerol for the propylene glycol of Smith.

Without acquiescence to the Examiner's position, and in an effort to expedite prosecution, claim 24 has been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of this claim in a continuing application. It is requested that this rejection be withdrawn.

Smith (U.S. 5,414,124) ("Smith") in view of Gauvreau *et al.* (U.S. 3,787,566) ("Gauvreau")

Claims 25-30 are rejected as allegedly obvious by Smith in view of Gauvreau. The Examiner applies Smith as above and alleges that Gauvreau teaches inclusion of cetyl pyridinium in disinfecting compounds. The Examiner then concludes that it would have been obvious to one skilled in the art to include cetyl pyridinium in the composition of Smith for an additive disinfecting effect or substitute cetyl pyridinium for the quaternary ammonium compounds of Smith based upon the availability of the quaternary ammonium compound and the expectation that these compounds are antimicrobial.

Without acquiescence to the Examiner's position, and in an effort to expedite prosecution, claims 25-30 have been canceled without prejudice or disclaimer but Applicants reserve the right to file the subject matter of these claims in one or more continuing applications. It is requested that this rejection be withdrawn.

Hall (U.S. 5,405,604) in view of Dickson (U.S. 5,520,575)

Claims 31-35 and 37-39 remain rejected as allegedly being obvious over Hall in view of Dickson. The Examiner maintains that Hall allegedly discloses a concentrated mouth rinse comprising about 10% of a quaternary ammonium compound in a solvent comprising propylene glycol but fails to disclose concentrations of the quaternary ammonium compound of about 40% by weight. The Examiner alleges that Dickson is application for teaching concentrations of antimicrobial agents from about 1% to about 30%.

The Examiner was not persuaded by Applicants' arguments made in the previous response regarding the combination of Hall and Dickson. The Examiner asserts that Dickson does not require the presence of an antimicrobial agent. Applicants maintain their arguments against the combination of Hall and Dickson as presented in the previous response.

Applicants believe that the Examiner is incorrect in his interpretation of the language of claims 31 and 34 because neither of the independent claims 31 and 34 require one or more

flavoring oils. The Examiner comments that such a limitation is not present in the claims but Applicants contend that the claim language of these independent claims precludes the interpretation that flavoring oils are present in the claimed compositions. In support of this position, the Examiner is referred to the arguments made in the response filed on April 30, 2001. Briefly, claim 31 is directed to a concentrated quaternary ammonium compound (QAC) solution that is limited by the language “consisting essentially of” to a QAC and at least one solubility enhancing agent. This language allows the addition of water to the solution and other non-essential components that do not materially affect the properties of the claimed solution. The Examiner alleges that Hall in view of Dickson renders claim 31 obvious, and therefore allegedly takes the position that the flavoring oil of Hall’s composition claimed in claim 1 of this patent is a non-essential component of Hall’s composition.

From a review of Hall, beginning in col. 3, line 39 to col. 5, line 38, flavoring agents are “essential ingredients” in the oil-in-water emulsion of Hall. Thus, Applicants maintain their position and because Hall considers the flavoring oil to be an essential ingredient of his disclosed mouthrinse. Further, Applicants believe that the focus should be on the interpretation of the transitional phrase “consisting essentially of” in claims 31 and 34 and their dependent claims. In this regard when this phrase precedes a list of ingredients in a composition claim, the claim typically limits the scope of a claim to the specified materials or steps that “...do not materially affect the basic and novel properties of the claimed invention.” (See *PPG Industries Inc. v. Guardian Industries Corp.*, 48 USPQ2d 1351, 1354 (Fed.Cir. 1998); *In re Herz*, 537 F.2d 549, 551-552 (CCPA 1976); Manual of Patent Examining Procedure Section 2111.03 (7th Ed. 1998, First Rev. Feb. 2000, emphasis added).

Applicants’ claimed solution in its preferred embodiment is useful for treating food products, and thus the addition of a flavoring oil, as disclosed in Hall’s composition, would materially affect the solution of the claimed invention. As indicated on page 10, lines 4-7, the use of the claimed solution “...does not alter the appearance, color, taste, and texture of the food product.” The inclusion of flavoring oil would, in fact, materially alter the taste, appearance, color and texture of the food product being treated, thereby rendering the solution unusable in Applicants’ disclosed use.

While Applicants contend that the claimed solution would be materially affected by the inclusion of a flavoring oil for contacting the claimed solution with food products, Applicants further contend that the inclusion of flavoring oil in the claimed solution for use in preventing the growth of microorganisms on, sanitizing or cleaning surfaces, liquids, equipment, animals, plants or any surface that would come into contact with food products

during processing, preparation, storage and/or packaging would be materially affected by the inclusion of a flavoring oil. For example, the flavoring oil would add a greasy layer to these surfaces, which would not be a desirable effect of using the claimed solution.

Upon the Examiner's acceptance of these arguments in regard to the essential nature of the flavoring oil in the Hall solution, then, Hall is not valid prior art to combine with Dickson, which cannot be present in claim 31. In regard to claim 34, this claim also contains the phrase "consisting essentially of." Therefore, the arguments regarding claim 31 above, also apply to claim 34.

For all of these reasons, Applicants believe that the inclusion of the flavoring oil in the claimed solutions of claims 31 and 34 would materially affect the basic and novel properties of the claimed invention. In view of the arguments above and in previous responses with regard to the Hall disclosure and the claim language "consisting essentially of," it is requested that the rejection based on Hall in view of Dickson be withdrawn with regard to rejected claims 31-35 and 37-39.

CONCLUSION

Entry of the present amendment is kindly requested because it does not raise any new issues, and additionally reduces issues for appeal. The present response is intended to be a complete response to the Examiner's Office Action. It is believed that the above arguments and amendments to the claims place the application in condition for allowance, and a notice to that effect is respectfully requested. If there are any minor issues which can be taken care by telephone, it is requested that the Examiner contact the undersigned attorney at telephone number below.

Respectfully submitted,

April 30, 2002
Date



Jayme A. Huleatt
Reg. No. 34,485

Foley & Lardner
3000 K Street, N.W.
Suite 500
Washington, D.C. 20007-5109
(202) 672-5542